



K4GSO.us

The Oracle

Newsletter of the Silver Springs Radio Club

Oldest Radio Club in Marion County, FL



September 2022

President's Message

Bill Gillespie, KW5BG

One of our largest club events is going to take place on the 24th and 25th of this month. We are gonna be operating from 0800 Saturday until 1800 Sunday. We can use as many operators as possible. Signing up for a specific time slot would be best, but coming out to operate at any time will be helpful. You're welcome to bring your own rig and connect to our existing antennas (or set up your own if you want!). Having folks who can log contacts would be beneficial as well. As part of our operation, the club will be supplying some food (chicken, sandwich, chips), soft drinks and water. Whether you are going to operate or not, please come out and support those who are! At a minimum, come out and see what Perry Field is all about!

A lot of work has taken place to get Perry Field ready for our Special Event. A number of folks have been cleaning up the inside of the trailer and working on the antennas. Also, Mel, KG7LQQ has mowed the area around the trailer and it looks great! Thanks Mel!

Jim, KN4MIV and I were finally able to present the second Boy Scout his radio and get him to check into the Monday night club net. We are continuing to encourage the other scouts to study for their Tech licenses and the current Techs to study for their General license.

I sent out a survey to the membership that was developed by Andy, NA4DA, and Annie, KN4RIC. While everyone didn't respond, the response was decent and they will present the results at the club meeting Tuesday evening.

Elsewhere in this Oracle, Elbert, KQ3K, will address Hamfest in more detail, but I want to encourage everyone to sign up to work sometime during the event and to support our vendors, who have supported us over the years. It's a fun time, come enjoy it with us!

We are getting into the heart of our traditional hurricane season. Make sure your equipment is in good

Next Meeting

Tuesday, September 20

Green Clover Hall

319 SE 26th Terrace, Ocala

6:00 PM Mentoring & Socializing

7:00 PM Meeting

Program: Customization of N3FJP

Kraig Pritts, KA2LHO

SSRC Board of Directors first Tuesday, 7:00 PM,
Green Clover Hall

Upcoming Events

VE Testing — November 8, GCH

SSRC 75th Anniversary Special Event

September 24-25, Perry Field

SSRC Hamfest

December 3

Silver Springs Radio Club Net

K4GSO Repeater, 146.610, PL 123

Mondays at 7:30 PM

shape and whatever emergency power capabilities you have are in working order.

I know this is a repeat from last month, but it's an important part of our year. Election season is upon us and we need folks to step up to serve. I'm sure you're tired of seeing me up front over the past 2 years, so we need some new blood! :-))

Continued on next page...

Our election is in November and here is the timeline we are working with.

- September – Nomination Committee appointed by President
- October – Slate announced, nominations from the floor
- November – Election
- December – Installation of officers for next year

If you are interested in being on the Nomination Committee, please let me know. We will need to replace the

President and Vice President due to them serving the maximum (2) years in a row. Gray, KC3DWY, and Tim, K8TAT, have agreed to continue in their respective positions for another year. This will help with continuity. We will announce which director positions may need to be replaced at our meeting. If you would like to serve on the board, be sure to let the Nomination Committee know.

See you at the Tuesday meeting!

Membership/Events

Elbert Wilkinson, KQ3K, Membership & Events Chairman

HAMFEST 2022:

Heads up! It's almost Hamfest time. December 2nd set-up and the event on the 3rd will be here in less than three months. Location will again be at First Christian Church, Ocala. Our Hamfest has been officially sanctioned by the ARRL. Vendors have been contacted and their attendance confirmed.

FCC is an excellent venue for our Hamfest offering indoor commercial vendor space, VE testing area and lots of room for outdoor tailgating. Our tailgate area has grown in importance and attendance. We were swamped last year. Bruce Richardson, WA4IPU, and his team have continued to refine the tailgate operation. Because of his efforts and good ideas, he has been named Hamfest Co-Chairman.

In order for us to have a successful Hamfest, we need folks to step up and volunteer to help. This is not hard work! Where do we need help? Good question. We need some muscle Friday morning to move and setup tables. We have several vendors who need help unloading their vans. Most of the work occurs in the morning.

Saturday morning begins very early with the tailgate team assisting the tailgaters in parking. After that it is pretty much maintaining order and helping direct our guests to the Memorial Hall where the commercial vendors are located and the Fellowship Hall for the non-commercial tables. We need volunteers to help place signage and direct parking at the adjacent Marion Technical Institute. We need members to help inside the Memorial Hall and tend to the entrances. The VE Team will need several folks to assist and Jim, KN4MIV, will be coordinating that effort.

The FCC Scout Troop will be providing food for a small charge to help support their operations.

Please signup here to work the event: <https://k4gso.us/hamfest/>.

More information will follow in board meetings, club meetings, the Oracle and on weekly nets as Hamfest time draws near. The final operation plan will be given at the November General Meeting.

Cole Hancock, KQ4BRL Receives HT

SSRC President, Bill, KW5BG, presents HT to Cole Hancock, KQ4BRL. Cole is one of the Scouts from Troop 439 who passed the Tech exam. Welcome, Cole!



My ARRL HQ Experience

John Wiley, W4FID

Editor's Note: I was pleased with the response to my Northern Florida Section Update at the August meeting. John shared some photos and his thoughts on his 2019 HQ visit, and I, in turn, will share with my clubmates.

John says: I enjoyed your presentation last night. Been a ham since St. Pat's day 1961 and an ARRL life member since about 1968. You showed some stuff I didn't know existed.

I have been to ARRL HQ 3 times since 1983. Toured the offices and labs and operated W1AW each time. Most recent was fall of 2019. Pix attached. Each time I enjoyed it and came away with the same impression. The staff were busy. The furnishings were well used – some likely second hand or SK gifts. The lab equipment was first class – necessary to give creditability to the results they publish of course. But the rest of the place was “every day working” environment not fancy/up scale.

I don't “rubber stamp” everything they do. But I do know they are the only game in town protecting our frequencies. The manufacturers are happy to sell ham equipment but most make their cash cow money off other demographics and businesses than ham radio. So the ARRL stands alone on our behalf.

The last time I was there I gave a few guys a fairly nice perk. I broke into a routine “plain vanilla” QSO with a few guys QSO on 20. As I broke in I asked “Can I join you?” You could feel their shock. Then I asked “when was the last time you or someone you know had W1AW call you?” Made their day!



PCARS
57th Annual Melbourne
Hamfest
 hosting the
2022 ARRL Florida State
Convention

October 7-8, 2022

Melbourne Auditorium
 625 E Hibiscus Blvd
 Melbourne, FL 32901

[INFO](#)

Marion County Traffic Net

Gray Moffett, KC3DWY
ARES Net Manager



Welcome to the home of the Marion County Traffic Net. The MCTN is the local affiliate of and is sponsored by the American Radio Relay League's National Traffic System. The primary function of the MCTN is to handle formal Radiogram message traffic as part of the NTS. We encourage you to visit the NTS website for training materials and other resources.

<http://www.arrl.org/NTS>

The MCTN meets Monday 8:00 PM on the 146.330(-) repeater, PL tone 123. We encourage everyone, with or without traffic, to check in. If you need assistance or have questions about anything we do on the MCTN, or if you have any interest in becoming a member of the MCTN staff, please contact the Net Manager.

Net Statistics—August 2022

QNI 18 (Total Check-ins)
QTC 10 (Total Messages)
QND 60 (Total Minutes)
Total Sessions 5

Silver Springs Radio Club

Quick Reference Card



ARRL Login: <http://www.arrl.org/>

Join ARRL: <http://www.arrl.org/membership>

ARRL VE: <http://www.arrl.org/become-an-arrl-ve>

ARRL LoTW: <http://www.arrl.org/logbook-of-the-world>

SE Division: <https://www.arrl.org/divisions/view/southeastern>

Northern Florida Section Website: <https://arrl-nfl.org/>

SSRC Website: <https://k4gso.us/>

QST NFL Newsletters: <https://arrl-nfl.org/1007-2/>

NFL ARES: <https://arrl-nfl.org/ares/>

4 Pass SSRC VE Testing

Jim Burgess, KN4MIV, SSRC VP/Test Liaison

We had four people test on Tuesday, September 13, 2022. All passed the test that they attempted. The results are as follows:

- Gary Neron, KS4TSX— General
- Carmen Mazzuca, KQ4BJX— General
- Michael Romanovich, KQ4CCH — General
- Gary Whittaker, KQ4DGF—Technician & General

Congratulations to all the people who tested with the Silver Springs Radio Club VE team. A big thanks to the VE team that selflessly volunteer their time:

Maurice N4LZ, Elbert KQ3K, Bill KW5BG, Carl KC5CMX, Doug K4LOX, and Kim KO4OIG

HamCation Needs You!!

Michael Cauley, W4ORL, General Chairman

The largest hamfest in the southeast US, 2nd largest in the world needs your help! HamCation is managed and operated by volunteers. Without volunteers, HamCation would not be able to happen each year. It takes hundreds of volunteers each year to help run HamCation and 2023 is no exception.



We need volunteers to help with our Security, Onsite Ticket Sales, Special Event Station, SWAP Table area, Tailgate area, Forums, Hospitality, IT, and even driving our Golf Cart Shuttles. These just to name a few of the areas. By volunteering for four hours in one day, we will provide you with an admission ticket that is good for all three days of the show. By volunteering at least 8 hours in one day, we will also provide you a meal ticket for lunch or dinner in our Volunteer Lounge.

We don't just need volunteers on the show days, we have opportunities to volunteer as early as the Monday before the show starts. You could even volunteer before the show starts, earn your ticket, and spend the next 3 days at the show.

For more information to include a description of each volunteer position needed and its duties and to sign up go to: www.hamcation.com/hamcation-volunteer Be sure to read the directions as each volunteer needs to submit the form and we asked that only one area is selected each day. If you want to volunteer in more than one area in a day, please submit a form for each position. You will then be contacted by the Chairman of the area you volunteer for to create a schedule based on your availability and our needs.



Finally: An Affordable Antenna Analyzer

Ivory Williams, W6IVY

It is seldom you find a product costing less than \$100 being compared to similar devices costing hundreds to thousands more. And when those reviewers are hams and engineers who use the more expensive products daily, give buy reviews, you listen. I Did. Bob, K6AII a Southern California seasoned ham and a PhD engineer made this recommendation.

But that is exactly what has happened. The ham community finally has a tool that meets its most basic need at an affordable price.

The first tool a new ham quickly decides not to purchase is the antenna analyzer. It's just too hard to justify a \$300 plus tool for occasional use, especially if you are a technician class ham. So, unless the club or a friend has an analyzer most ham's will never use one. **But now you don't have an excuse.**



"Antenna analyzers are arguably one of the most important pieces of equipment in an Amateur Radio station. Designed to measure impedance or standing wave ratio (SWR), the properly used antenna analyzer determines the details of an antenna's tuning characteristics and helps maximize its performance. Even the simplest antennas can benefit from using one, and your success on the air may depend on it, but only if you understand and avoid the common pitfalls".

[ARRL 2889 Understanding Your Antenna Analyzer: by Joel R. Hallas]

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To those who would say, “but Ivory, that is a NanoVNA, I say 'a rose is a rose is a rose'”. Besides, the vast majority of antenna analyzers are only used for SWR.

If I were the product manager this is what it would look like and every ham would buy one.

So what makes the **NanoVNA H4**: (4inch screen) the model this article is about, different.

Is it price and features or features and price? Both. And the ease of use of its main feature, SWR, as mentioned above.

https://nanovna.com/?page_id=21

Caution: What's perceived as a learning curve is more an unfamiliarity with an unknown device that has an intimidating name, Network Vector Analyzer. Its initial display is indeed very intimidating, but only touches the surface of its complexity, waiting to be explored, if so chosen and hides its simplicity for hams.

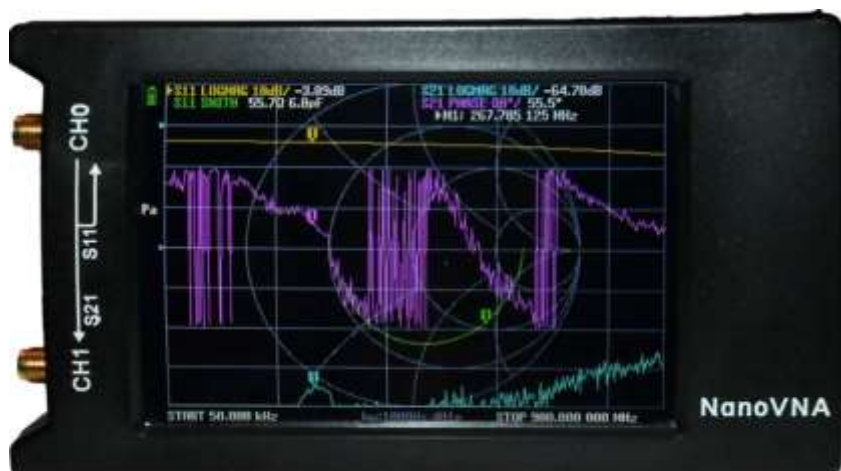
BUT I quickly discover how easy it is to configure and mimic my MFJ 269C analog analyzer.

That is why I call mine the NanoSWR.

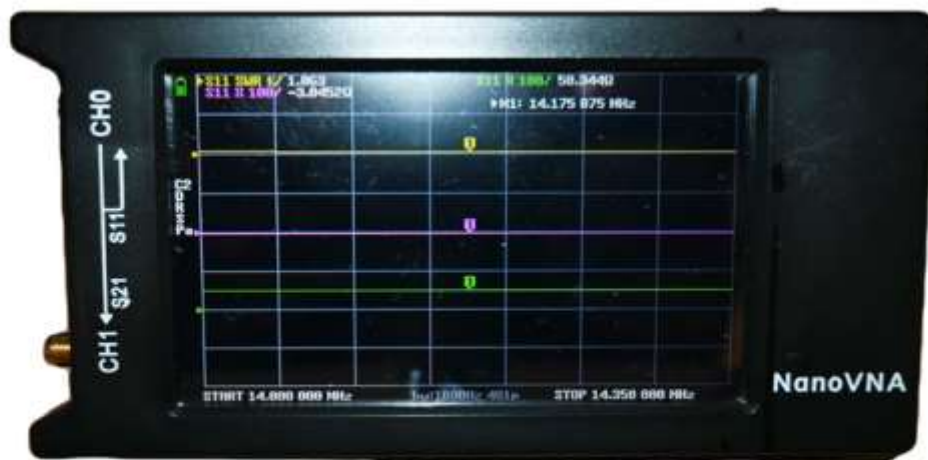
It's easier to setup and use than a Baofeng HT, a HF radio, or even a MFJ analyzer. It is menu drive. So if you can order a Big Mac, fries and a small drink you can use the NanoVNA.

Remember the Simon Says childhood game? Nano says, if you go 2 steps forward, then 2 steps down in the menus, you must go 4 steps backward to return to the previous menu (no Home button).

Take a look at the Menu Structure Map and it will make sense.



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Change Frequency with just a Touch (Finger or Stylus) Add, Remove or Change and Configure the Display and Frequency ranges you want to use. Markers are also configurable as is the location of readings.



Want More? LOGMAG and SMITH Chart added to Default Screen (on Dummy Load) Add what YOU want to see. Remove everything else. Phase, Polar, Delay, Linear, Real, etc. *If you can handle it, it's probably there.*



How Easy It Is to configured a Manual Tuner **WITHOUT** using the radio. (80 Meter for FT8) You won't be disturbing the band. Note: the meter is not used with the NanoVNA.

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Software

The NanoVNA also has available several software options,

(1) NanoVNASaver, connects to the computer for display and a (2) Web Client, and an (3) Android app. (4) RigExpert AntScope2 (per RigExpert website) now supports the NanoVNA models H and F.

Hardware [Where to Buy]

The NanoVNA in this article is the **model H4**. The NanoVNA is open source hardware and just like its software counterparts, the specifications are all available. That simply means that anyone can build or modify the original design. And there are simply hundreds of variations that have evolved.

I purchased mine (2020) from GigaParts for \$69.00 (it is no longer available). If I needed to buy another it would be the same H4 model based on the design by eddy555 (https://nanovna.com/?page_id=21). And with the market being flooded with various models, including the original 2.8" model, I would probably buy from R&L Electronics, <https://store2.rlham.com/shop/catalog/index.php> (I've not purchased from them before, yet). I haven't seen any negatives reports and their prices appear fair, currently \$89.00. Ham stores don't typically carry open source products.

You will need SMA to XXX adapters for your type of cables.

Conclusion:

Usability: This is really a long term usage review (2 years). In spite of its screen washout in sunlight and finger print attraction, this is my best buy as a ham. It just makes working with antennas so very easy and simple. Does that mean I would sell my MFJ 269C? No, its paid for, plus I'm a pack ham rat. *I would not have bought the 269.* I actually learned more about the 269 after buying the NanoVNA.

Durability: It has survived a couple of "bungee cable" drops of a least 2 feet without damage to the SMA connectors. In addition to normal usage, being jostled and being bumped around while being packed and unpacked, it has not missed a SWR. **Most of all, it matches my MFJ 269C readings perfectly.** Except for more flexible RG-174 extension cables, I'm still using all the original items.

Final Note: I'm not using the default firmware. So some features in the images may not be in the latest purchased version. As I previously mentioned, the NanoVNA is Open Source. Developer (DiSlord) has continuously been updating the firmware with many extended enhancements. Improvements can be seen here. <https://github.com/DiSlord/NanoVNA-D/releases> 73, Ivory

References:

W2AEW youtube channel: <https://www.youtube.com/user/w2aew/search?query=nanovna>

[#314](#): How to use the NanoVNA to sweep / measure an antenna system's SWR and optimize its tuning

[#316](#): Use NanoVNA to measure coax length

An introduction to VNAs and the NanoVNA by Alan Wolke, W2AEW [ARRL NNJ Tech Coordinator] discussion about NanoVNA starts at 29 minute mark.

https://www.youtube.com/watch?v=38mN4cqB-tc&list=PL4ZSD4omd_AylEyNCQYR3RcEb0olukPEJ&index=14

The Difference Between Antenna Analyzers and Antenna Tuners

<https://www.onallbands.com/the-difference-between-antenna-analyzers-and-antenna-tuners%EF%BB%BF/>

How to properly use a NanoVNA V2 Vector Network Analyzer & Smith Chart (Tutorial)

Andreas Spiess

https://www.youtube.com/watch?v=_pjcEKQY_Tk&list=PL3XBzmAj53RnbYBRvImuPyp24S4jfBrb5&index=16&t=7s



If you promised to not to buy any-more ham equipment and you really need a reason to not buy a NanoVNA, here it is. But you'll be sorry. [Sunlight screen washout]

August Operating Day Pictures

Thanks to Jim, KN4MIV



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August Operating Day Pictures



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1713 E Silver Springs Blvd



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Computer Repair (PC, Mac & Chrome)
Data Recovery and Device Security
VHS Conversion & Custom PC Building

SSRC Classified Ads

If you have a business service and want to place an ad in this section, contact Marty Brown, n4gl.marty@gmail.com.

At this time we are not charging for advertising space, however the board may approve fees in the future.



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Submitted by Andy, NA4DA

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President - Bill Gillespie, KW5BG
Vice President - Jim Burgess, KN4MIV
Secretary - Gray Moffett, KC3DWY
Treasurer - Tim Trombley, K8TAT
Past President - Elbert Wilkinson, KQ3K

Directors:

Mike Condon - W9MNC
Wayne Brown - N4FP
Hayden Kaufman - N2HAY

Club Minutes and Financial Reports

SSRC Information

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[Green Clover Key Card](#)
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[Membership Application](#)
[Buy/Sell/Trade](#)
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[NFL Section Website](#)
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Committee Chairs

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